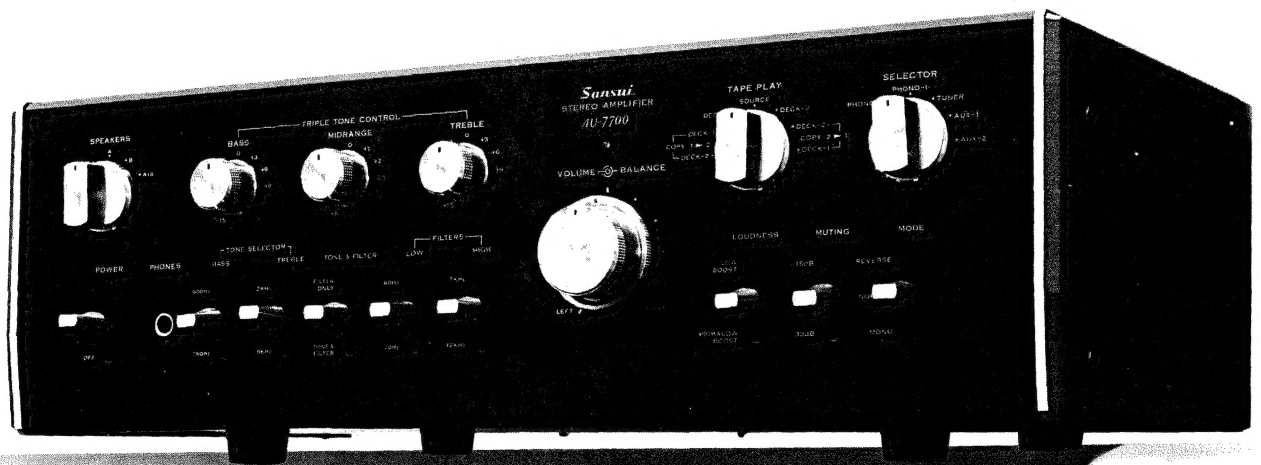


SERVICE MANUAL

STEREO AMPLIFIER

SANSUI AU-7700



Sansui

SANSUI ELECTRIC CO., LTD.

This service manual is designed for service engineers to repair, adjust, maintain and order the replacement parts of the AU-7700 correctly. When ordering the parts, use the stock number and parts name specifically referring to the Parts Locations & Parts Lists. For general usage and maintenance of the unit, please refer to the Operating Instructions attached with the unit.

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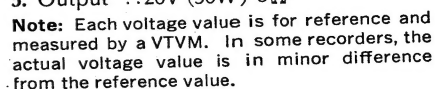
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1. SPECIFICATIONS

POWER OUTPUT (at rated distortion)
 CONTINUOUS RMS POWER OUTPUT
 54 Watts per channel x 2
 (both channels driven)
 LOAD IMPEDANCE8Ω
 POWER BAND20 to 20,000Hz
 TOTAL HARMONIC DISTORTION
 less than 0.1% (from AUX)
 Music power (IHF).....250W (4Ω 1,000Hz)
 140W (8Ω 1,000Hz)
 Continuous rms power output ..55+55W (8Ω 1,000Hz)
 INTERMODULATION DISTORTION (at rated power
 output 70Hz: 7,000Hz=4: 1 SMPTE method)
 OVERALLless than 0.15%
 PREAMPLIFIER ONLY ..less than 0.1%
 POWER (MAIN) AMPLIFIER ONLY
 less than 0.1%
 FREQUENCY RESPONSE (at 1 Watt output)
 OVERALL10 to 50,000Hz ± 0.5 dB
 POWER (MAIN) AMPLIFIER ONLY
 5 to 50,000Hz ± 1 dB
 EQUALIZATION (RIAA curve)
 30 to 15,000Hz ± 0.5 dB
 DAMPING FACTOR30 (8Ω)
 INPUT SENSITIVITY AND INPEDANCE
 (1kHz, for rated power output)
 PHONO-12.5mV 30kΩ, 50kΩ, 100kΩ
 adjustable
 PHONO-22.5mV 50kΩ
 (Max. input capability: 300mV at 0.2% total
 harmonic distortion)
 TUNER100mV 50kΩ
 AUX-1 & -2100mV 50kΩ
 TAPE DECK-1 & -2 (Pin Jacks)..100mV 50kΩ
 TAPE DECK-1 (DIN Socket)....100mV 50kΩ
 MAIN IN800mV 50kΩ
 OUTPUT LEVEL (1kHz)
 TAPE DECK-1 & -2 (Pin Jacks)..100mV
 TAPE DECK-1 (DIN Socket)....30mV
 PRE OUT800mV
 (Max. output level: 5V at 0.5% total harmonic
 distortion)
 CROSSTALK (1kHz, for rated power output)
 PHONO-1 & -2better than 50dB
 TUNERbetter than 50dB
 AUX-1 & -2better than 55dB
 TAPE DECK-1 & -2better than 55dB
 MAIN INbetter than 60dB

HUM AND NOISE (IHF)
 PHONO-1 & -2better than 75dB
 TUNERbetter than 85dB
 AUX-1 & -2better than 85dB
 TAPE DECK-1 & -2better than 85dB
 MAIN INbetter than 100dB
 SWITCHES AND CONTROLS
 BASS (± 5 steps)..... ± 13 dB at 50Hz
 TONE SELECTOR (TURNOVER FREQUENCIES)
 150Hz, 300Hz, 600Hz
 MIDRANGE (± 5 steps).. ± 5 dB at 1kHz
 TREBLE (± 5 steps)..... ± 13 dB at 15kHz
 TONE SELECTOR (TURNOVER FREQUENCIES)
 2kHz, 4kHz, 8kHz
 LOUDNESS (Volume Control: -30dB)
 LOW BOOST+10dB at 50Hz
 HIGH & LOW BOOST ..+10dB at 50Hz
 +8dB at 10kHz
 LOW FILTER-3dB at 20Hz (12dB/oct.)
 -3dB at 60Hz (12dB/oct.)
 HIGH FILTER-3dB at 7kHz (6dB/oct.)
 -3dB at 12kHz (12dB/oct.)
 MUTING-30dB, -15dB
 OTHERS
 TRANSISTORS57
 DIODES22
 ZENER DIODES3
 LED1
 POWER REQUIREMENTS ..100, 117, 220, 240V, 50/60Hz
 POWER CONSUMPTION ..120W (rated), 350W (max.)
 DIMENSIONS434mm (17 $\frac{1}{8}$ ") W
 130mm (5 $\frac{1}{8}$ ") H
 315mm (12 $\frac{7}{16}$ ") D
 WEIGHT12.3kg (27.1 lbs) Net,
 14.0kg (30.9 lbs) Packed

* Design and specification subject to change without notice for improvements.



3. ADJUSTMENT

3-1. Driver Circuit Board Adjustment (See Fig. 3-1, 3-2 and 3-3)

Note: 1. Confirm the AC power supply voltage.

2. MASTER VOLUME Minimum

3. SPEAKERS Selector.....A

4. Make the SP terminals free (no load).

5. For adjustment, run the unit for more than 3 minutes after the power is switched ON.

6. Room temperature should be 18~28°C (65~83°F) for bias current adjustment.

STEP	SUBJECT	EQUIPMENT	MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
1	DC 0V L-ch	DC volt meter	SP terminal L-ch (See Fig. 3-3)	F-2097 VR01	0V \pm 10mV	◦Turn volumes of VR03, VR04 CCW
2	DC 0V R-ch	Same as above	SP terminal R-ch (See Fig. 3-3)	F-2097 VR02	Same as above	
The unit installing quick acting fuses						
3-1	Bias current L-ch	DC milliammeter	F-2097 F01	F-2097 VR03	45 \pm 10mA	◦Step down meter's range accordingly
4-1	Bias current R-ch	Same as above	F-2097 F02	F-2097 VR04	Same as above	
※The unit not installing quick acting fuses						
3-2	Bias current L-ch	DC milliammeter	Between a red wire & plus side of C602 on F-2416 (See Fig. 3-2)	F-2097 VR03	45 \pm 10mA	◦Step down meter's range accordingly
4-2	Bias current R-ch	Same as above	Between other red wire & plus side of C601 on F-2416 (See Fig. 3-2)	F-2097 VR04	Same as above	

※ Bias current adjustment on the unit not installing quick acting fuses.

1) Disconnect a red wire (plus side) from C602 on F-2416 which goes to driver & power supply circuit board, F-2097, then confirm that collector voltage +41V of power transistor, TR23 (L-ch) or TR24 (R-ch) on F-2097 is not supplied.

2) Adjust VR03 (L-ch) or VR04 (R-ch) so that bias current on one channel at the disconnected points between A and B (see Fig. 3-2) is 45 \pm 10mA.

3) After connecting the red wire again, adjust it on another channel as same as steps 1) and 2).

Fig. 3-1

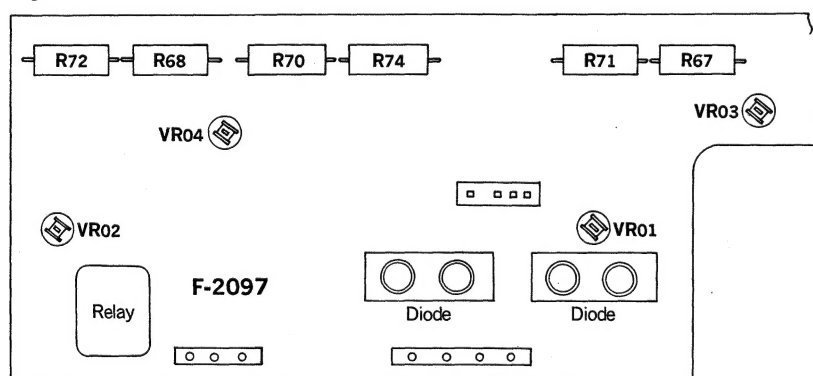
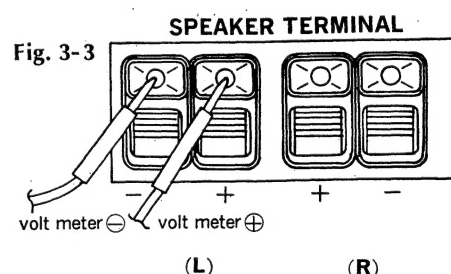
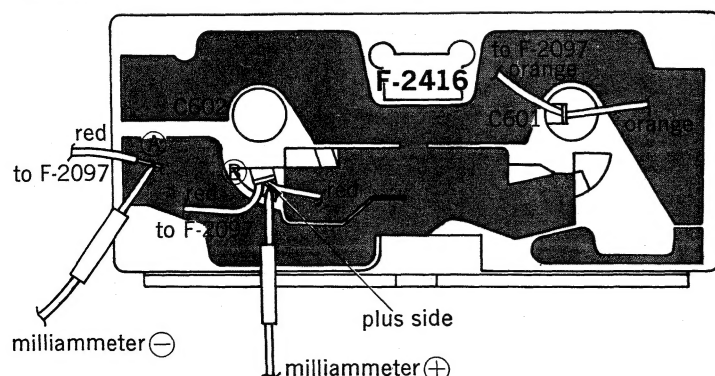


Fig. 3-2



4. TROUBLESHOOTING CHART

4-1. Troubleshooting on Power Supply Section

Symptom	Check Point	Cause & What to Do
1. No power supplied to each section		
1-1. Indicator lamp for power not lighted		<ul style="list-style-type: none"> 1. Power supply cord open 2. Imperfect contact of power switch, S701 3. Power fuse, F701 open 4. Defective power transformer, T701 5. F07 on F-2097 open 6. Defective D21 on F-2097 7. Imperfect contact of voltage selector, PU01
1-2. Indicator lamp for power lighted		
1) $\pm 41V$ not supplied to collector on each power transistors (+41V, TR21~TR24, -41V, TR25~TR28)		<ul style="list-style-type: none"> 8. F05 or F07 on F2097 open 9. Defective D17 or D19 on F-2097
2) +24V not supplied to terminal 24 and -25V not supplied to terminal 25 on F-2092		<ul style="list-style-type: none"> 10. Defective power transformer, T701 11. F01 (or F03) on F-2092 open 12. Defective D01, D03, D07 or D09 on F-2092 13. Defective TR09, TR11, TR13 or TR15 on F-2092

4-2. Troubleshooting on Audio Section

1. Relay, RL01 inoperative (protector circuit inoperative)		
		<ul style="list-style-type: none"> 1. F07 on F-2097 open 2. Defective D21 on F-2097 3. Defective D13, D15 or D25 on F-2097 4. Defective TR29, TR31 or TR33 on F-2097 5. Defective relay, RL01 on F-2097 6. Defective TR21 or TR23 (TR22 or TR24) on F-2097 7. Defective TR25 or TR27 (TR26 or TR28) on F-2097
2. Bias current not adjustable to +45mA by VR03 (L-ch) or VR04 (R-ch) on F-2097		
		<ul style="list-style-type: none"> 8. Defective TR05 or TR07 (TR06 or TR08) on F-2097 9. Defective VR03 (VR04) on F-2097
3. Center Voltage not adjustable to 0V by VR01 (L-ch) or VR02 (R-ch) on F-2097		
		<ul style="list-style-type: none"> 10. Defective TR05 (TR06) on F-2097 11. Defective VR01 (VR02) on F-2097

Symptom

Check Point

Cause & What to Do

4. TUNER or AUX input inoperative

- 4-1. Both channels inoperative
- 1. Imperfect contact of speakers switch, S702a, c (S702b, d)
 - 2. Defective Power Supply Section
- 4-2. One channel inoperative
- * Set MODE switch to REVERSE
- 1) Inoperative channel reverses
 - 3. Tuner connected from this set has faulty
 - 4. Imperfect contact of SELECTOR switch, S01c (S01d)
 - 5. Imperfect contact of TAPE PLAY switch, S02a (S02b)
 - 2) Inoperative channel not reverses

* Set TONE & FILTER switch to DEFEAT

 - 2-1) The inoperative channel becomes operating
 - 6. Defective TR09 or TR11 (TR10 or TR12) on F-2095
 - 7. Imperfect contact of LOW FILTER switch, S04a, c (S04b, d)
 - 8. Defective TR01 (TR02) on F-2096
 - 2-2) The inoperative channel is still not operating
 - 9. Defective TR01, TR03, TR05 or TR07 (TR02, TR04, TR06 or TR08) on F-2095
 - 10. Imperfect contact of PRE-MAIN switch, S04a (S04b)
 - 11. Defective Driver & Power Supply Circuit Board

5. PHONO inoperative

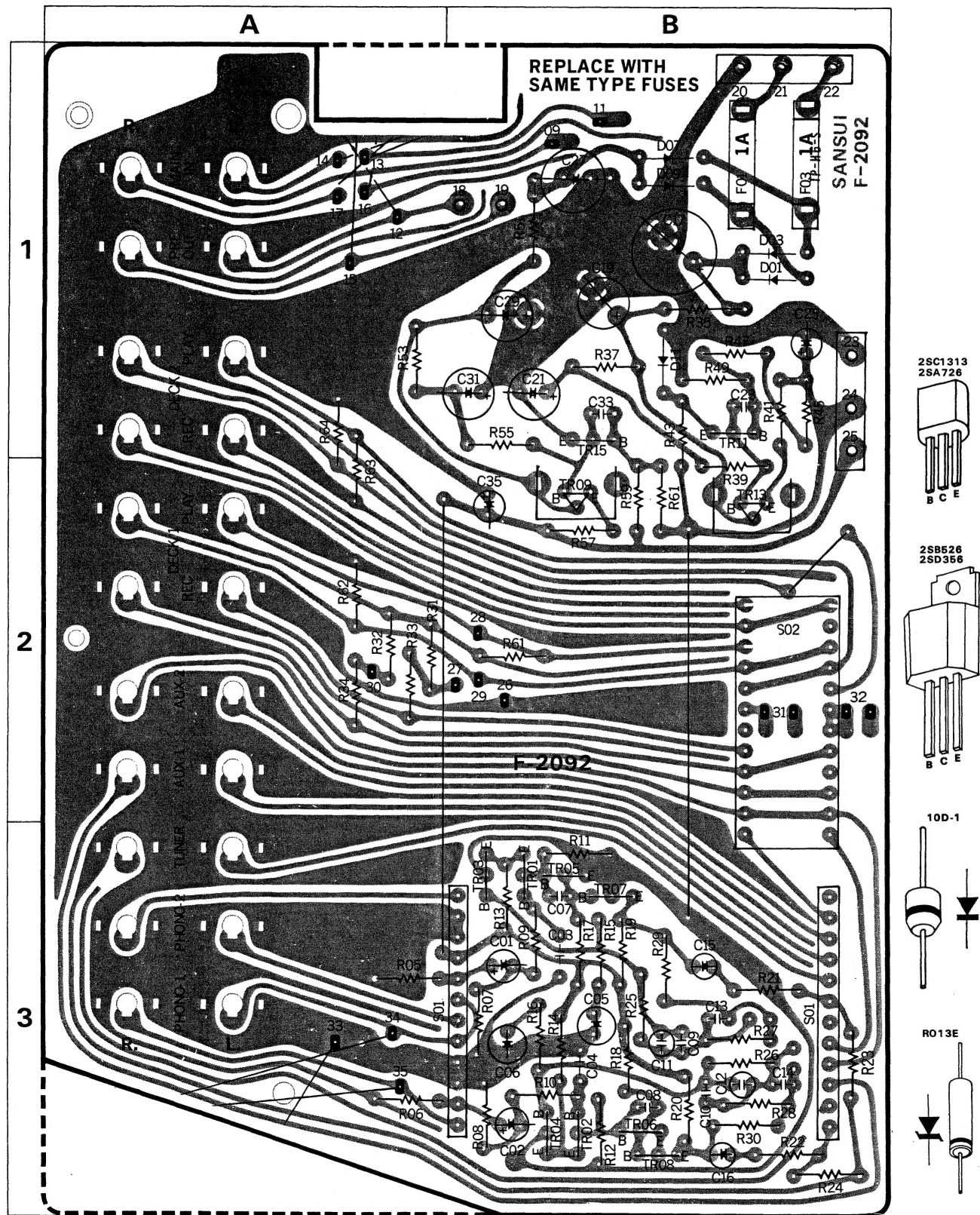
- 5-1. Both channels inoperative
- 1. Refer to 4-1. of 4. Both channels inoperative
- 5-2. One channel inoperative
- * Set MODE switch to REVERSE
- 1) Inoperative channel reverses
 - 2. Turntable connected from this set has faulty
 - 3. Imperfect contact of SELECTOR switch, S01a (S01b)
 - 4. Defective TR01, TR03, TR05 or TR07 (TR02, TR04, TR06 or TR08) on F-2092
 - 2) Inoperative channel not reverses
 - 5. Refer to 4-2. of 4. One channel inoperative

5. PARTS LOCATIONS AND PARTS LISTS

5-1. F-2092 Equalizer & Power Supply Circuit Board

(Stock No. 7550580 Complete Circuit Board F-2092)

Conductor Side



Parts List

Parts No.	Stock No.	Description	Position
TR01, 02	0306071, 2	2SC1313 (G, H)	3 B
TR03, 04	0306071, 2	2SC1313 (G, H)	3 B
TR05, 06	0300470, 1	2SA726 (F, G)	3 B
TR07, 08	0306070-2	2SC1313 (F, G, H)	3 B
TR09	0303280-2	2SB526 (C, D, E)	2 B
TR11	0306070-2	2SC1313 (F, G, H)	1 B
TR13	0308450-2	2SD356 (C, D, E)	2 B
TR15	0300470, 1	2SA726 (F, G)	1 B
D01	0310340	10D-1	1 B
D03	0310340	10D-1	1 B
D07	0310340	10D-1	1 B
D09	0310340	10D-1	1 B
D11	0316310	RO13E(B) Zener Diode	1 B
C01, 02	0519103	0.47 μ F 50V E.C.	2 B
C03, 04	0660330	33pF 50V C.C.	2 B
C05, 06	0532100	10 μ F 16V E.C.	2 B
C07, 08	0660470	47pF 50V C.C.	2 B
C09, 10	0600826	0.0082 μ F 50V M.C.	2 B
C11, 12	0621561	560pF 50V P.C.	2 B
C13, 14	0600276	0.0027 μ F 50V M.C.	2 B
C15, 16	0533339	3.3 μ F 25V E.C.	2 B
C17	0515221	220 μ F 50V E.C.	1 B
C19	0514101	100 μ F 35V E.C.	1 B
C21	0515470	47 μ F 50V E.C.	1 B
C23	0660221	220pF 50V C.C.	1 B
C25	0513100	10 μ F 25V E.C.	1 B
C27	0515101	100 μ F	1 B
C29	0515470	47 μ F 50V E.C.	1 B
C31	0515470	47 μ F	1 A, B
C33	0660221	220pF 50V C.C.	1 B
C35	0513479	4.7 μ F 25V E.C.	2 B
C901, 902	0601107	0.01 μ F 50V M.C.	
C903	0515339	3.3 μ F	
C904, 905	0657223	0.022 μ F 50V C.C.	
C906, 907	0660101	100pF	
R01, 02	0107563	56k Ω	3 A
R03, 04	0107473	47k Ω	3 A
R05, 06	0107224	220k Ω	3 A
R07, 08	0107224	220k Ω	3 B
R09, 10	0107152	1.5k Ω	3 B
R11, 12	0107822	8.2k Ω	3 B
R13, 14	0107124	120k Ω	3 B
R15, 16	0107821	820 Ω	3 B
R17, 18	0107223	22k Ω	3 B
R19, 20	0107472	4.7k Ω	3 B
R21, 22	0107101	100 Ω	3 B
R23, 24	0107563	56k Ω	3 B
R25, 26	0107474	470k Ω	3 B
R27, 28	0107273	27k Ω	3 B
R29, 30	0107561	560 Ω	3 B
R31, 32	0107104	100k Ω	2 A
R33, 34	0107224	220k Ω	2 A
R35	0104181	180 Ω 1 W C.R.	1 B
R37	0107272	2.7k Ω	1 B
R39	0107821	820 Ω	2 B
R41	0107220	22 Ω	1 B
R43	0107821	820 Ω	1, 2 B
R45	0107392	3.9k Ω	1 B
R47	0107471	470 Ω	1 B
R49	0107682	6.8k Ω	1 B

Parts List

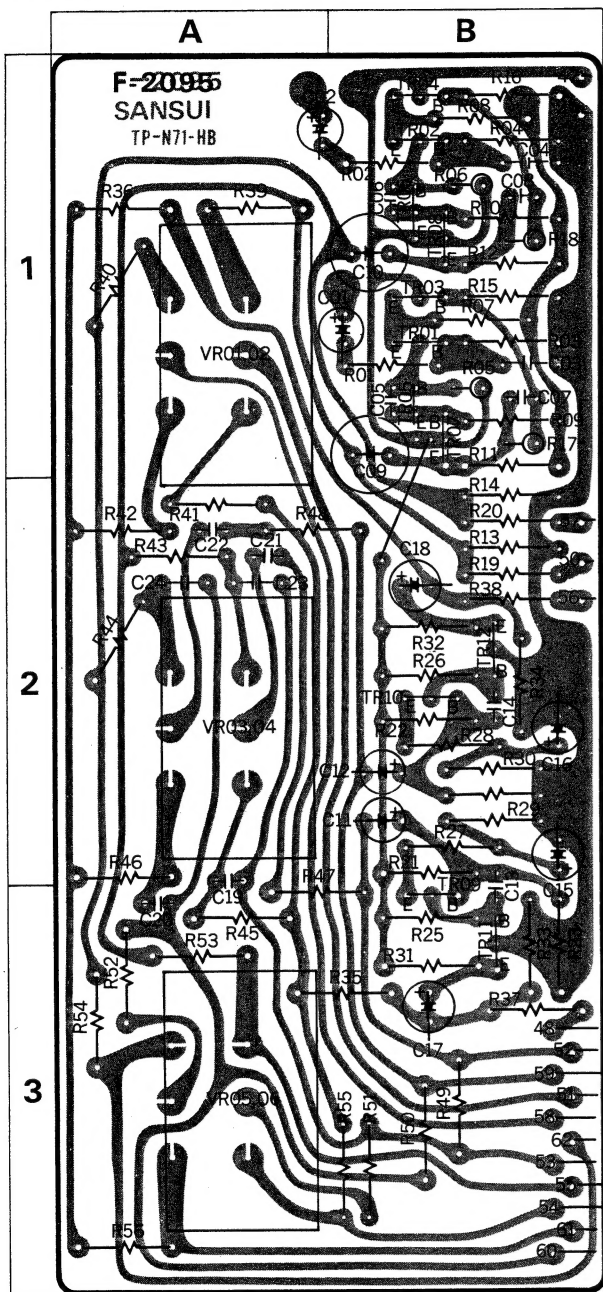
Parts No.	Stock No.	Description	Position
R51	0103331	330 Ω 1/2 W C.R.	1 B
R53	0107392	3.3k Ω	1 A
R55	0107122	1.2k Ω	1 B
R57	0107330	33 Ω	2 B
R59	0107153	15k Ω	2 B
R60	0107153	15k Ω	2 B
R61	0107474	470k Ω	2 B
R62	0107474	470k Ω	2 A
R63	0107474	470k Ω	1, 2 A
R64	0107474	470k Ω	1, 2 A
R901, 902	0107104	100k Ω	
S01	1102550	SRE2-4-5	3 B
S02	1102560	SRE2-6-7	2, 3 B
F01	0430830	1A (20m/m)	1 B
F03	0430830	1A (20m/m)	1 B
	2310150	Fuse Holder	
	2430250	Pin Jack	
	5936691	Heat Sink	

Abbreviations

C.R. : Carbon Resistor	BP.E.C.: Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	C.C. : Ceramic capacitor
Ce.R. : Cement Resistor	Mi.C. : Mica Capacitor
M.R. : Metallized Film Resistor	O.C. : Oil Capacitor
M.C. : Mylar Capacitor	P.C. : Polystyrene Capacitor
E.C. : Electrolytic Capacitor	T.C. : Tantalum Capacitor

5-2. F-2095 Tone Control Circuit Board (Stock No. 7560820 Complete Circuit Board F-2095)

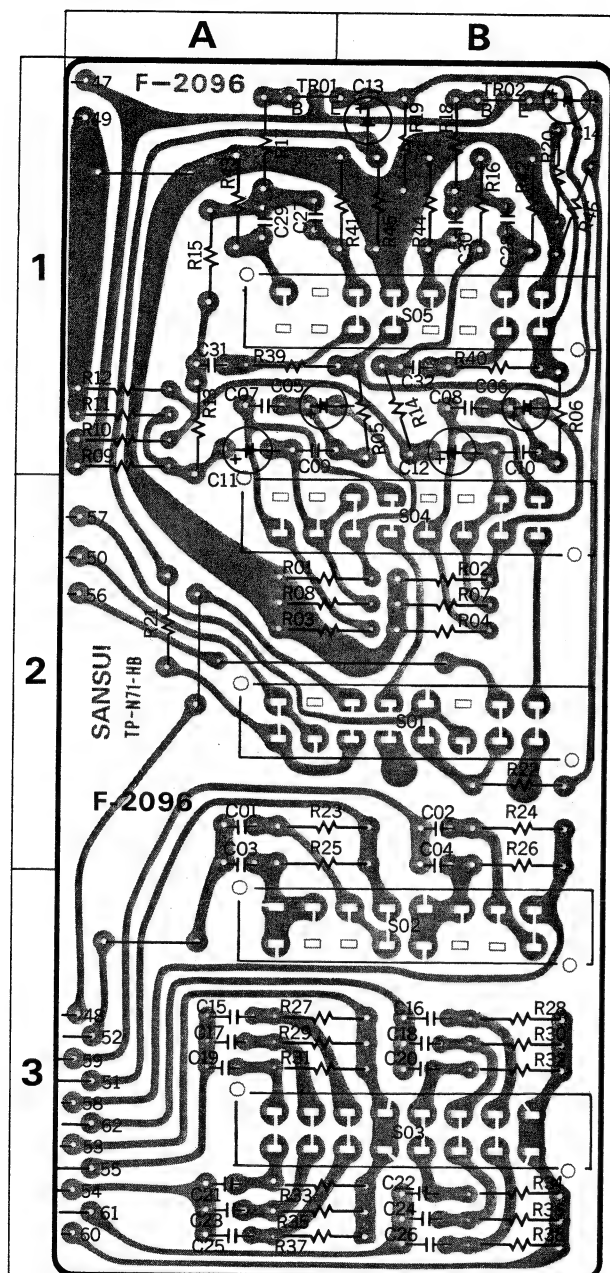
Conductor Side



Parts List

Parts No.	Stock No.	Description	Position
TR01, 02	0306070, 1	2SC1313 (F, G)	1 B
TR03, 04	0306070, 1	2SC1313 (F, G)	1 B
TR05, 06	0300470, 1	2SA726 (F, G)	1 B
TR07, 08	0306070, 1	2SC1313 (F, G)	1, 2B, 1B
TR09, 10	0306070, 1	2SC1313 (F, G)	3 B, 2 B
TR11, 12	0300470, 1	2SA726 (F, G)	3 B
C01, 02	0519103	0.47 μ F 50V E.C.	1 A, B
C03, 04	0660330	33pF	1 B
C05, 06	0660470	47pF 50V C.C.	1 B
C07, 08	0660680	68pF	1 B
C09, 10	0533100	10 μ F 25V BP.E.C.	1, 2B, 1B
C11, 12	0519105	2.2 μ F 50V E.C.	2 B
C13, 14	0660100	10pF 50V C.C.	2, 3B, 2B
C15, 16	0510100	10 μ F 16V E.C.	2 B
C17, 18	0519001	10 μ F 25V E.C.	3 B, 2 B
C19, 20	0601686	0.0068 μ F	2 A, 3 A
C21, 22	0601476	0.0047 μ F	2 A
C23, 24	0601686	0.0068 μ F 50V M.C.	2 A
C901, 902	0601107	0.01 μ F	
C903	0657223	0.022 μ F 50V C.C.	
R01, 02	0107222	2.2k Ω	1 B
R03, 04	0107124	120k Ω	1 B
R05, 06	0106822	8.2k Ω 1/4W C.R. (E.L.R.)	1 B
R07, 08	0107124	120k Ω	1 B
R09, 10	0107223	22k Ω	1 B
R11, 12	0107472	4.7k Ω 1/4W C.R.	1 B
R13, 14	0107104	100k Ω	2 B
R15, 16	0107222	2.2k Ω	1 B
R17, 18	0106183	18k Ω 1/4W C.R. (E.L.R.)	1 B
R19, 20	0107101	100 Ω	2 B
R21, 22	0107824	820k Ω	2 B
R23, 24	0107154	150k Ω	3 B, 2 B
R25, 26	0107123	12k Ω	3 B, 2 B
R27, 28	0107121	120 Ω	2 B
R29, 30	0107332	3.3k Ω	2 B
R31, 32	0107332	3.3k Ω	3 B, 2 B
R33, 34	0107104	100k Ω	2 B, 2 B
R35, 36	0107101	100 Ω	3A, B, 1A
R37, 38	0107101	100 Ω	3 B, 2 B
R39, 40	0107272	2.7k Ω 1/4W C.R.	1 A
R41, 42	0107272	2.7k Ω	2 A
R43, 44	0107472	4.7k Ω	2 A
R45	0107472	4.7k Ω	3 A
R46	0107472	4.7k Ω	2 A
R47, 48	0107273	27k Ω	3 A, B
R49, 50	0107223	22k Ω	3 B
R51, 52	0107222	2.2k Ω	3 B, 3 A
R53, 54	0107822	8.2k Ω	3 A
R55, 56	0107822	8.2k Ω	3 B, 3 A
VR01, 02	1060060, 1	50k Ω (B) \times 2	1 A
VR03, 04	1060060, 1	50k Ω (B) \times 2	2 A
VR05, 06	1060060, 1	50k Ω (B) \times 2	3 A

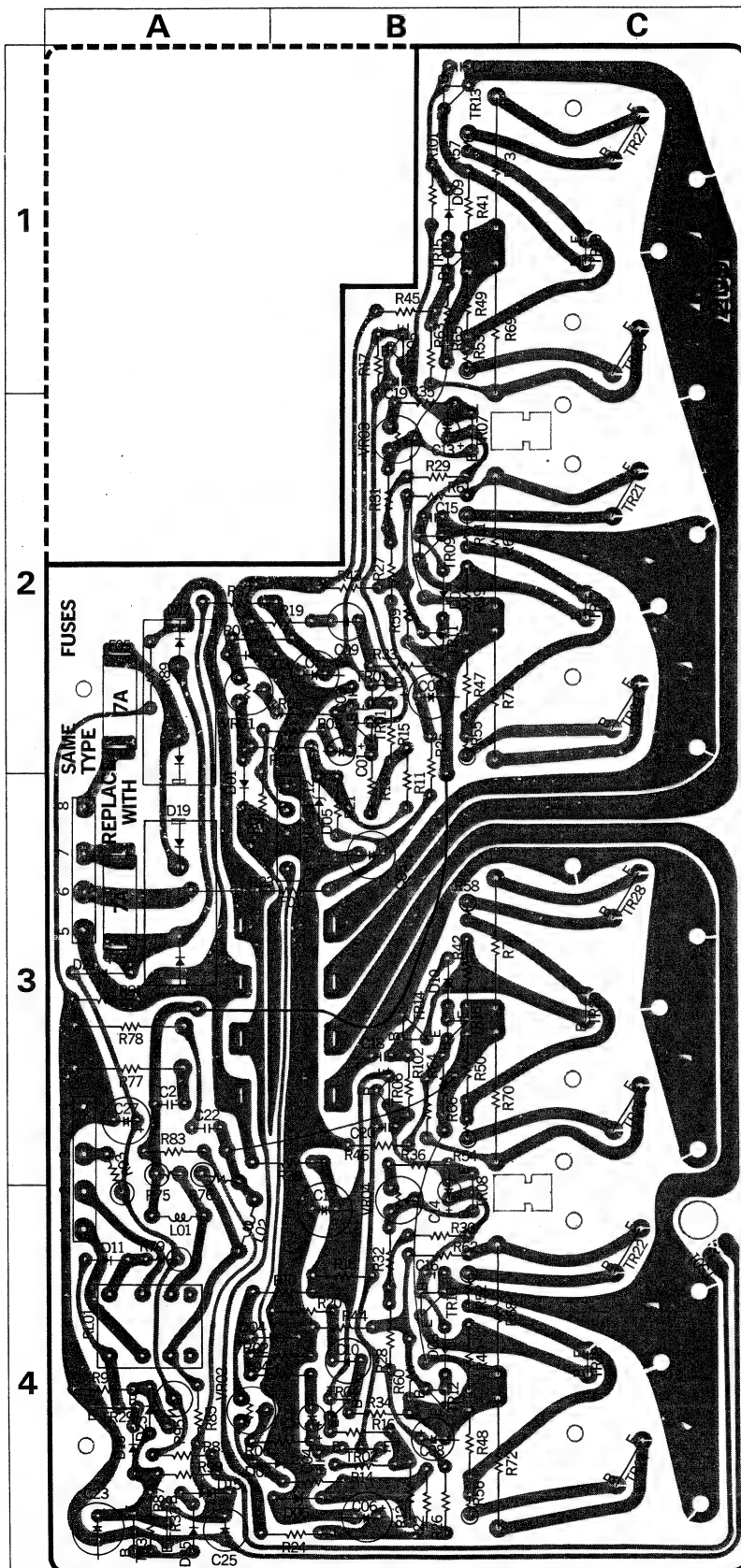
Conductor Side



Parts No.	Stock No.	Description	Position
TR01,02	0306070, 1	2SC1313® (F, G) Transistor	1A, B, 1B
C01, 02	0621821	820 pF 50V P.C.	2 A, 2 B
C03, 04	0601156	0.0015 μF 50V M.C.	2 A, 2 B
C05, 06	0573228	0.22 μF 25V T.C.	1A, B, 1B
C07, 08	0601687	0.068 μF	1 A, 1 B
C09, 10	0601277	0.027 μF	1A, B, 1B
C11, 12	0519101	1 μF	1 A, 1 B
C13, 14	0519105	2.2 μF	1 B
C15, 16	0601687	0.068 μF	3 A, 3 B
C17, 18	0601227	0.022 μF	3 A, 3 B
C19, 20	0601686	0.0068 μF	3 A, 3 B
C21, 22	0601686	0.0068 μF	3 A, 3 B
C23, 24	0601227	0.022 μF	3 A, 3 B
C25, 26	0601687	0.068 μF	3 A, 3 B
C27, 28	0601106	0.001 μF	1 A, 1 B
C29, 30	0601156	0.0015 μF	1 A, 1 B
C31, 32	0601276	0.0027 μF	1 A, 1 B
R01, 02	0107474	470k Ω	2A, B, 2B
R03, 04	0107474	470k Ω	2A, B, 2B
R05, 06	0107393	39k Ω	1 B
R07, 08	0107394	390k Ω	2B, 2A, B
R09, 10	0107274	270k Ω	1 A
R11, 12	0107274	270k Ω	1 A
R13, 14	0107472	4.7k Ω	1 A, 1 B
R15, 16	0107123	12k Ω	1 A, 1 B
R17, 18	0107102	1k Ω	1 A, 1 B
R19, 20	0107682	6.8k Ω	1 B
R21, 22	0107101	100 Ω	2 A, 2 B
R23, 24	0107105	1M Ω	2A, B, 2B
R25, 26	0107105	1M Ω	2A, B, 2B
R27, 28	0107105	1M Ω	3A, B, 3B
R29, 30	0107105	1M Ω	3A, B, 3B
R31, 32	0107105	1M Ω	3A, B, 3B
R33, 34	0107105	1M Ω	3A, B, 3B
R35, 36	0107105	1M Ω	3A, B, 3B
R37, 38	0107105	1M Ω	3A, B, 3B
R39, 40	0107105	1M Ω	1A, B, 1B
R41, 42	0107105	1M Ω	1 B
R43, 44	0107105	1M Ω	1 A, 1 B
R45, 46	0107104	100k Ω	1 B
S01	1170500	SLC14351	2 A, B
S02	1170490	SLC14301	3 A, B
S03	1170490	SLC14301	3 A, B
S04	1170490	SLC14301	2 A, B
S05	1170490	SLC14301	1 A, B

C.R. : Carbon Resistor	BP.E.C. : Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	C.C. : Ceramic capacitor
Ce.R. : Cement Resistor	Mi.C. : Mica Capacitor
M.R. : Metallized Film Resistor	O.C. : Oil Capacitor
M.C. : Mylar Capacitor	P.C. : Polystyrene Capacitor
E.C. : Electrolytic Capacitor	T.C. : Tantulum Capacitor

5-4. F-2097 Driver & Power Supply Circuit Board (Stock No. 7570910 Complete Circuit Board F-2097) Conductor Side



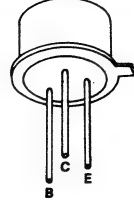
2SA726
2SC711



2SC735
2SA662



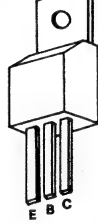
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2SC959



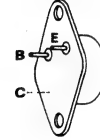
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2SA733
2SC945



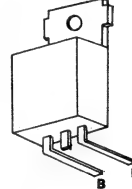
2SC1124



2SC1619
2SA808



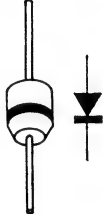
2SD382
2SB537



1S953



10D-1



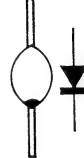
1N-60



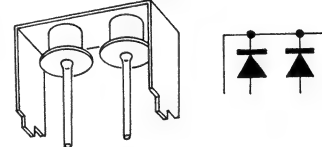
SV-02



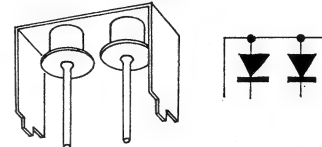
DS-430



SS-5



SS-5R



Parts List

Parts No.	Stock No.	Description	Position
TR01, 02	0300470, 1	2SA726 (W) (F, G)	2 B. 4 B
TR03, 04	0300470, 1	2SA726 (W) (F, G)	2 B. 4 B
TR05, 06	0305900, 1	2SC1124 (1, 2)	1 B. 3 B
TR07, 08	0305731~3	2SC711 (E, F, G)	2 B. 3, 4B
TR09, 10	0305742, 3	2SC959 (L, K)	2 B
TR11, 12	0305640, 1	2SC735 (O, Y)	2 B. 4 B
TR13, 14	0300212, 3	2SA606 (L, K)	1 B. 3 B
TR15, 16	0300220, 1	2SA562 (O, Y)	1 B. 3 B
TR17, 18	0308441, 2	2SD382 (M, L)	2 C. 4 C
TR19, 20	0303271, 2	2SB537 (M, L)	1 C. 3 C
TR21, 22	0306190~3	2SC1619 (R, O, Y)	2 C. 4 C
TR23, 24	0306190~3	2SC1619 (R, O, Y)	2 C. 4 C
TR25, 26	0300630~3	2SA808 (R, O, Y)	1 C. 3 C
TR27, 28	0300630~3	2SA808 (R, O, Y)	1 C. 3 C
TR29	0306130~2	2SC1364 (5, 6, 7)	4 A
TR31	0300510~2	2SA733 (P, Q, R)	4 A
TR33	0305950~2	2SC945 (R, Q, P)	4 A
Transistor			
D01, 02	0340090	DS-430	2,3A,4A,B
D03, 04	0340090	DS-430	2A,B,4A,B
D05, 06	0316230	RD-9,1E(B)	3 B. 4 B
D07, 08	0311050	1S953	2 B. 4 B
D09, 10	0311050	1S953	1 B. 3 B
D11	0310340	10D-1	4 A
D13	0311050	1S953	4 A
D15	0310490	SV-02	4 A
D17	0311310	SS-5	2 A
D19	0311320	SS-5R	3 A
D21	0310340	10D-1	3 A
D23	0310331	1N60	4 A
D25	0340090	DS-430	4 A
D27	0310331	1N60	
D28	0310031	1N60	
Diode			
TS01	0320110	TS3-85 Thermistor	4 C
C01, 02	0519105	2.2 μ F 50V E.C.	2 B. 4 B
C03, 04	0660470	49pF 50V C.C.	2 B. 4 B
C05, 06	0515101	100 μ F 50V E.C.	3 A. 4 B
C07, 08	0515470	47 μ F 50V E.C.	2 B. 4 B
C09, 10	0530470	47 μ F 6.3V E.C.	2 B. 4 B
C11, 12	0515101	100 μ F 50V E.C.	2 B. 4 B
C13, 14	0515109	1 μ F 50V E.C.	2 B. 4A,B
C15, 16	0660100	10pF 50V C.C.	2 B. 4 B
C17, 18	0660100	10pF 50V C.C.	1 B. 3 A
C19, 20	0660220	22pF 50V C.C.	1 B. 3 A
C21, 22	0601687	0.068 μ F 50V M.C.	3 A
C23	0510471	470 μ F 6.3V E.C.	4 A
C25	0531101	100 μ F 10V E.C.	4 A
C27	0515330	33 μ F 50V E.C.	3 A
C901	0601106	0.001 μ F 50V M.C.	
C903, 904	0601107	0.01 μ F 50V M.C.	
R01, 02	0107474	470k Ω	3 A. 4A,B
R03, 04	0107103	10k Ω	2A,B,4A,B
R05, 06	0107104	100k Ω	2 B. 4A,B
R07, 08	0107822	8.2k Ω	2A,B,4 B
R09, 10	0107393	39k Ω	2A,B,4A,B
R11, 12	0107472	4.7k Ω	2, 3B. 4 B
R13, 14	0107220	22 Ω	2, 2B. 4 B
R15, 16	0107220	22 Ω	2 B. 4 B
R17, 18	0107821	820 Ω	1, 2 B. 4B
R19, 20	0107332	3.3k Ω	2A, B. 4B
$\frac{1}{4}$ W C.R.			

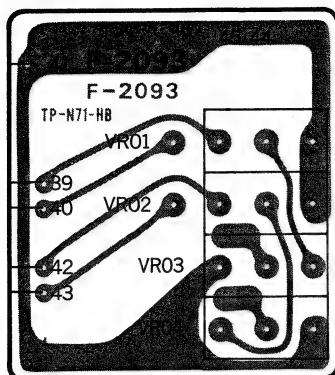
Parts No.	Stock No.	Description	Position
R21, 22	0103472	4.7k Ω	3 B. 4 B
R23, 24	0103181	180 Ω	3A,B,4A,B
R25, 26	0103102	1k Ω	2,3 B. 4 B
R27, 28	0103472	4.7k Ω	2 B. 4 B
R29, 30	0107390	39 Ω	2 B. 4 B
R31, 32	0107682	6.8k Ω	2 B. 4 B
R33, 34	0107104	100k Ω	2 B. 4 B
R35, 36	0107122	1.2k Ω	2 B. 3 B
R37, 38	0103101	100 Ω	2A,B,3AB
R39, 40	0103102	1k Ω	2 B. 4 B
R41, 42	0103102	1k Ω	1 B. 3 B
R43, 44	0107183	18k Ω	2 B. 4 B
R45, 46	0107183	18k Ω	1 B. 3 B
R47, 48	0103101	100 Ω	2 B. 4 B
R49, 50	0103101	100 Ω	1 B. 3 B
R51, 52	0103100	10 Ω	2 B. 4 B
R53, 54	0103100	10 Ω	1 B. 3 B
R55, 56	0103100	10 Ω	2 B. 4 B
R57, 58	0103100	10 Ω	1 B. 3 B
R59, 60	0107102	1k Ω	2 B. 4 B
R61, 62	0107471	470 Ω	2 B. 4 B
R63, 64	0107471	470 Ω	1 B. 3 B
R65, 66	0107102	1k Ω	1 B. 3 B
R67, 68	0133478	0.47 Ω	2 B. 4 B
R69, 70	0133478	0.47 Ω	1,2 B. 3B
R71, 72	0133478	0.47 Ω	2 B. 4 B
R73, 74	0133478	0.47 Ω	1 B. 3 B
R75	0104479	4.7 Ω	3 A
R76	0104479	4.7 Ω	3 A
R77	0105100	10 Ω	3 A
R78	0105100	10 Ω	3 A
R79	0104181	180 Ω	4 A
R81	0107823	82k Ω	4 A
R83	0107823	82k Ω	3 A
R85	0107104	100k Ω	4 A
R87	0107473	47k Ω	4 A
R89	0103682	6.8k Ω	2 A
R91	0103682	6.8k Ω	3 A
R93	0105182	1.8k Ω	3, 4 A
R95	0105182	1.8k Ω	4 A
R97	0107221	220 Ω	4 A
R99	0107223	22k Ω	4 A
R100, 101	0107102	1k Ω	1 B
RL01	1150251	RABK-2B Relay	4 A
L01, 02	4290210	2.5 μ H Micro Inductor	4 A, B
F05, 07	0430920	7A (20m/m) Fuse	2 A. 3 A
VR01, 02	1035110	4.7k Ω (B) Semi Variable Resistor	2 A
VR03, 04	1035070	1k Ω (B) Resistor	2 B. 3, 4B
	2310150	Fuse Holder	
	5937061	Heat Sink	

Abbreviations

C.R. : Carbon Resistor	BP.E.C. : Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	C.C. : Ceramic capacitor
Ce.R. : Cement Resistor	Mi.C. : Mica Capacitor
M.R. : Metallized Film Resistor	O.C. : Oil Capacitor
M.C. : Mylar Capacitor	P.C. : Polystyrene Capacitor
E.C. : Electrolytic Capacitor	T.C. : Tantalum Capacitor

5-5. F-2093 Volume Circuit Board

Conductor Side



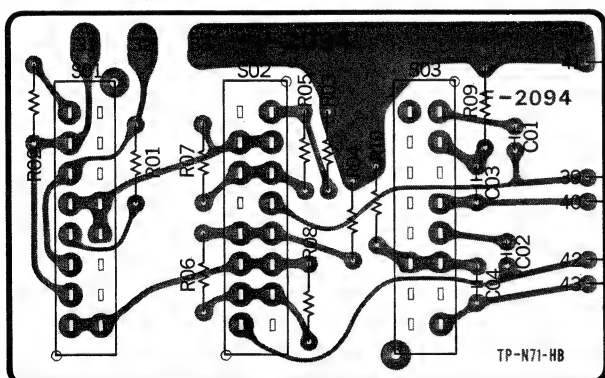
Parts List

Parts No.	Stock No.	Description
VR01-04	1060320	250k Ω (MN,B) \times 4 Variable Resistor

5-6. F-2094 Accessory Switch Circuit Board

(Stock No. 7592120 Complete Circuit Board F-2094)

Conductor Side



Parts List

Parts No.	Stock No.	Description
C01, 02	0660391	390pF 50V C.C.
C03, 04	0601227	0.022 μ F 50V M.C.
R01, 02	0107103	10k Ω
R03, 04	0107103	10k Ω
R05, 06	0107823	82k Ω
R07, 08	0107184	180k Ω
R09, 10	0107223	22k Ω
S01	1170500	SLC14351
S02	1170490	SLC14301
S03	1170490	SLC14301

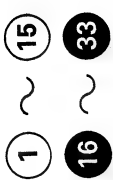
5-7. Other Parts (Front Side)

Parts List

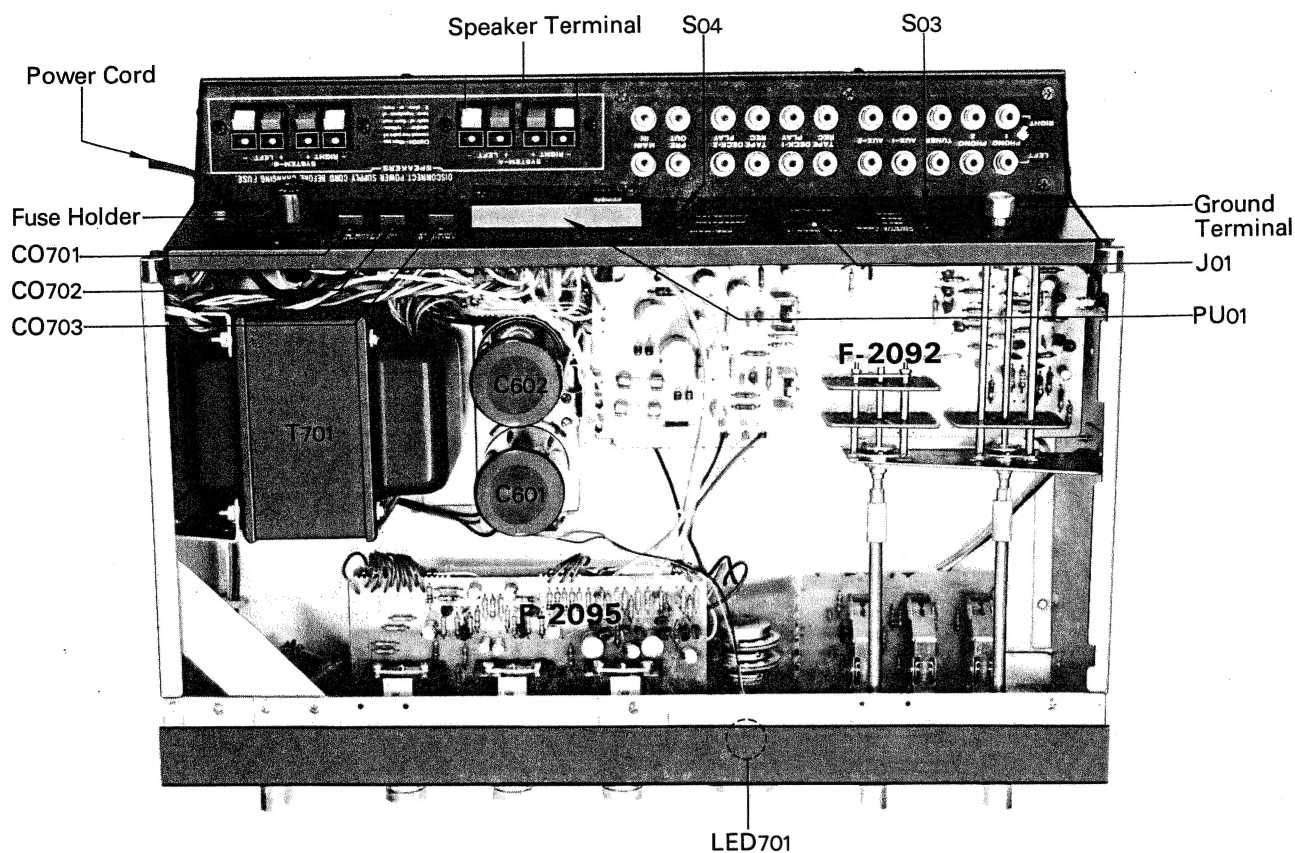
Parts No.	Stock No.	Description
1	5101161	Binding Head Screw, M4 \times 6
2	5109222	Binding Head Tapping Screw, M3 \times 8
3	5309270	Side Panel (Right)
4	5109121	Binding Head Tapping Screw, M3 \times 6
5	5269830	Side Panel Retainer
6	5309260	Side Panel (Left)
7	5109222	Binding Head Tapping Screw, M3 \times 8
8	5122540	Toothed Lock Washer (External), 3 ϕ
9	5006340	Metal Bonnet
10	5317880	S-5 Type Knob
11	5318040	S-5 Type Knob (Tone Control)
12	5326460	E-1 Type Knob (Lever Switch)
13	5318001	W0-3 Type Knob (Volume)
14	5318080	U-5 Type Knob (Balance)
15	5109222	Binding Head Tapping Screw, M3 \times 8
16	{ 5309210	Front Panel
	{ 5269800	Holder (Light Emitted Diode)
17	5109222	Binding Head Tapping Screw, M3 \times 8
18	5269880	Stopper (Front Panel)
19	7726080	Light Emitted Diode (SDB-501A-RD)
20	1101560, 1	Rotary Switch Y-1-4-4 (Speaker)
21	1090060, 1	50k Ω (B) \times 2 Tone Control Volume
22	1170330	Lever Switch (Power)
23	2430190	Headphone Jack
24	1170490	Lever Switch (Control)
25	1170500	Lever Switch (Control, Mode)
26	1060320	250k Ω (MN, B) \times 4 Volume, Balance Volume
27	1102560	Rotary Switch SRE2-6-7 (Tape Play)
28	1102550	Rotary Switch SRE2-4-5 (Selector)
29	5109222	Binding Head Tapping Screw, M3 \times 8
30	5166520	Washer Head Tapping Screw, M3 \times 12
31	5516940	Foot
32	5058220	Bottom Plate
33	5047470	Masking (Lever Switch)

Abbreviations

C.R. : Carbon Resistor	BP.E.C.: Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	C.C. : Ceramic capacitor
Ce.R. : Cement Resistor	Mi.C. : Mica Capacitor
M.R. : Metallized Film Resistor	O.C. : Oil Capacitor
M.C. : Mylar Capacitor	P.C. : Polystyrene Capacitor
E.C. : Electrolytic Capacitor	T.C. : Tantalum Capacitor



5-8. Other Parts (Top Side)

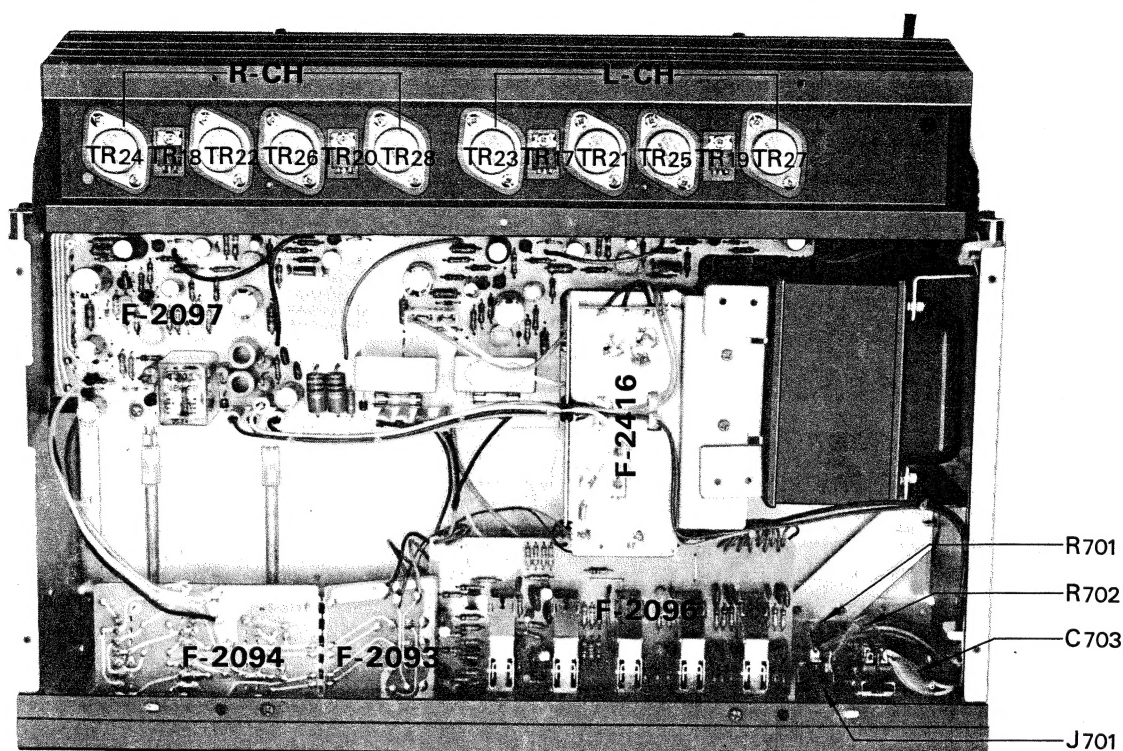


Parts List

Parts No.	Stock No.	Description
C601	0559360	10000 μ F } 50V E.C.
C602	0559360	10000 μ F }
LED701	7726080	SDB-501A-RD Light Emitted Diode
J01	2090040	DIN Jack
S03	1110290	SSB02332 } Slide Switch
S04	1110280	
CO701~703	2450050	AC Outlet
F701	0431290	6A Power Fuse (100~117V)
	0431260	3A Power Fuse (220~240V)
	2300060	Fuse Holder
T701	4002110	Power Transformer

Parts No.	Stock No.	Description
PU01	2410080	Voltage Selector, socket
	2410090	Voltage Selector, plug
	2290100	4P Speaker Terminal
	3800020	Power Cord (KP-200)
	2230050	Ground Terminal

5-9. Other Parts (Bottom Side)



Parts List

Parts No.	Stock No.	Description
TR17	0308441, 2	2SD382 (M, L)
TR18	0308441, 2	2SD382 (M, L)
TR19	0303271, 2	2SB537 (M, L)
TR20	0303271, 2	2SB537 (M, L)
TR21	0306190~3	2SC1619 (R, O, Y)
TR22	0306190~3	2SC1619 (R, O, Y)
TR23	0306190~3	2SC1619 (R, O, Y)
TR24	0306190~3	2SC1619 (R, O, Y)
TR25	0300630~3	2SA808 (R, O, Y)
TR26	0300630~3	2SA808 (R, O, Y)
TR27	0300630~3	2SA808 (R, O, Y)
TR28	0300630~3	2SA808 (R, O, Y)
C703	0659801	0.01 μ F 1.4kV C.C.
R701	0104221	220 Ω } 1W C.R.
R702	0104221	220 Ω }
J701	2430190	Headphone Jack

Transistor

Abbreviations

C.R.	: Carbon Resistor
S.R.	: Solid Resistor
Ce.R.	: Cement Resistor
M.R.	: Metallized Film Resistor
M.C.	: Mylar Capacitor
E.C.	: Electrolytic Capacitor
BP.E.C.	: Bi-Polar Electrolytic Capacitor
C.C.	: Ceramic capacitor
Mi.C.	: Mica Capacitor
O.C.	: Oil Capacitor
P.C.	: Polystyrene Capacitor
T.C.	: Tantalum Capacitor

6. REPLACEMENT OF POWER TRANSISTORS

- 1) Remove 4 pcs-screws installing on left (or right) side panel.
- 2) Remove 11 pcs-screws installing on bottom plate.
- 3) Remove all connectors and screws, ① and ② (see Fig. 6-1) installing on F-2097.
- 4) Remove screw, ③, ④, ⑤ and ⑥ (see Fig. 6-2) installing heat sink.
- 5) Remove driver & power supply circuit board ass'y (F-2097), then replace the transistors with new ones.

Fig. 6-1

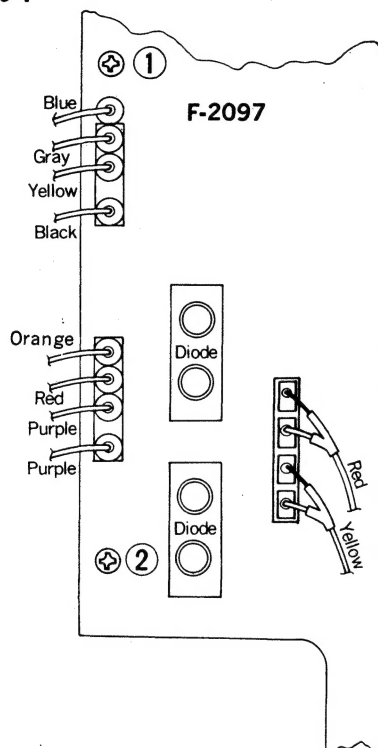
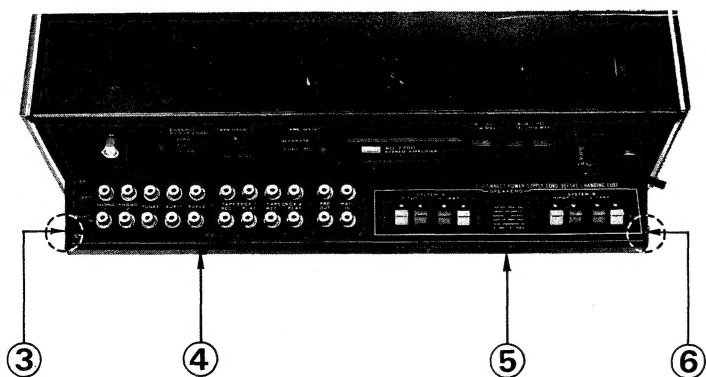
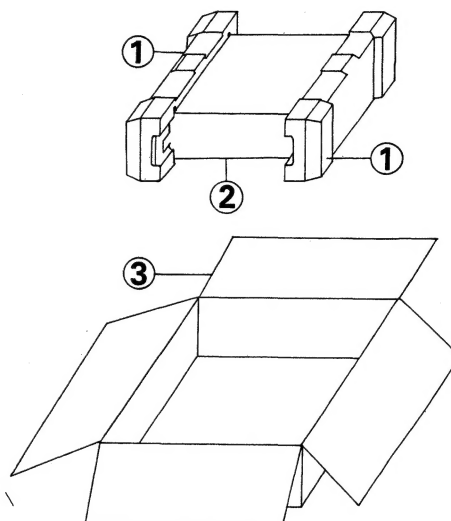


Fig. 6-2



7. PACKING LIST

Parts No.	Stock No.	Description
1	9027810	Styrofoam Packing
2	9116152	Vinyl Cover
3	9008051	Carton Case



8. ACCESSORY PARTS LIST

Stock No.	Description
5066250	Pin Plug Cover
9208250	Operating Instructions
9228250	Operating Instruction Sheet

9. SCHEMATIC DIAGRAM

* Design and specifications subject to change without notice for improvements.

